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COMMISSIONER FOR PATENTS
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Docket No.: 6001.1302
Date: February 9, 2006

In re application of: **Nicholas J. CAUNTER**
Serial No. 10/771,994
Filed: February 4, 2004
For: **SIGNATURE TRANSPORT DEVICE**

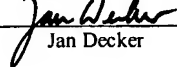
Sir:

Transmitted herewith is a **APPELLANT'S BRIEF UNDER 37 C.F.R. 41.37 (16 pages total)** in the above-identified application.

- [] Also transmitted herewith are:
[] Petition for extension under 37 C.F.R. 1.136
[] Other:
- [X] Check(s) in the amount of **\$500.00** is/are attached to cover:
[] Filing fee for additional claims under 37 C.F.R. 1.16
[] Petition fee for extension under 37 C.F.R. 1.136
[X] Other: **Appeal Brief Fee**
- [X] The Assistant Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0552.
- [X] Any filing fee under 37 C.F.R. 1.16 for the presentation of additional claims which are not paid by check submitted herewith.
- [X] Any patent application processing fees under 37 C.F.R. 1.17.
- [X] Any petition fees for extension under 37 C.F.R. 1.136 which are not paid by check submitted herewith, and it is hereby requested that this be a petition for an automatic extension of time under 37 CFR 1.136.


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I hereby certify that the documents referred to as attached therein and/or fee are being deposited with the United States Postal Service as "first class mail" with sufficient postage in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on February 9, 2006.
DAVIDSON, DAVIDSON & KAPPEL, LLC

BY: 
Jan Decker



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re: Application of: CAUNTER
Serial No.: 10/771,994 Confirmation No.: 3574
Filed: 02/04/2004
For: SIGNATURE TRANSPORT DEVICE
Art Unit: 3651
Examiner: Ridley, Richard
Customer No.: 23280
Atty. Docket: 6001.1302

Mail Stop: APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

February 9, 2006

APPELLANT'S BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Appellant submits this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Final Rejection dated August 1, 2005 in this application. The statutory fee of \$500.00 is paid concurrently herewith.

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1. REAL PARTY IN INTEREST

The real party in interest is Goss International Americas, Inc., a corporation having a place of business in Dover, New Hampshire, and the assignee of the entire right, title and interest in the above-identified patent application. The invention was assigned to Goss International Americas, Inc. by a chain of assignments originating from inventor Nicholas J. Caunter. The most recent assignment was recorded on October 20, 2004 at reel 015886, frame 0619.

2. RELATED APPEALS AND INTERFERENCES

Appellant, his legal representatives, and assignee are not aware of any appeal, interference or judicial proceeding that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

3. STATUS OF CLAIMS

Claims 1-3 and 5-16 are pending. Claim 4 has been canceled. Claim 10 was objected to but indicated as allowable. Claims 1-3 and 5-9, 11-16 have been finally rejected as per the Final Office Action dated August 1, 2005.

The rejection to claims 1-3 and 5-9, 11-16 and the objection to claim 10 thus is appealed. A copy of appealed claims 1-3 and 5-16 is attached hereto as Appendix A.

4. STATUS OF AMENDMENTS AFTER FINAL

No amendments to claims were filed after the final rejection. An advisory action was issued on November 21, 2005. A Notice of Appeal was filed on December 6, 2005 and received by the U.S.P.T.O. on December 9, 2005.

5. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 recites a device for removing folded signatures (e.g., 10 in Fig. 1, e.g., specification at paragraph [0024]) from a saddle-back conveyor (e.g., 100 in Fig. 1, e.g., specification at paragraph [0024]) comprising: a rotating arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]) rotating a full rotation; a first gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) mounted on the moving arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]); and an electromechanical actuator (e.g., 52 in Fig. 3B,

e.g., specification at paragraph [00031]) connected to the first gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) for opening and closing the first gripper (e.g., specification at paragraph [0030]), the electromechanical actuator (e.g., 52, e.g., specification at paragraph [00031]) being mounted on the moving arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]).

Independent claim 11 recites a device for removing folded signatures (e.g., 10 in Fig. 1, e.g., specification at paragraph [0024]) from a saddle-back conveyor (e.g., 100 in Fig. 1, e.g., specification at paragraph [0024]) comprising: a rotating arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]) moving in a reciprocating or rotational movement rotating a full rotation; a first gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) mounted on the moving arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]); an electromechanical actuator (e.g., 52, e.g., specification at paragraph [00031]) connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]); and a controller (e.g., 60 in Fig. 3B, e.g., specification at paragraph [0031]) for providing electronic signals to the electromechanical actuator so as to direct the electromechanical actuator (e.g., 52, e.g., specification at paragraph [00031]) to open or close the first gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) during the reciprocating or rotational movement.

Independent claim 14 recites a method for removing signatures (e.g., 10 in Fig. 1, e.g., specification at paragraph [0024]) from a saddle-back conveyor (e.g., 100 in Fig. 1, e.g., specification at paragraph [0024]) comprising the steps of: reciprocating or rotating an arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]) to move a gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) to remove signatures (e.g., 10 in Fig. 1, e.g., specification at paragraph [0024]) from a saddle-back conveyor (e.g., 100 in Fig. 1, e.g., specification at paragraph [0024]), the arm (e.g., 20 in Fig. 1, e.g., specification at paragraph [0026]) defining a full rotation range of motion; and electronically controlling the gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) during the range of motion to open and close the gripper (e.g., 22 in Fig. 1, e.g., specification at paragraph [0026]) to grip the signature (e.g., 10 in Fig. 1, e.g., specification at paragraph [0024]).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 2, 3, 7, 8, 9, 11, 12, 13, 16 should be rejected under 35 U.S.C. § 102 (b) as being anticipated by Emigh et al. (US 5,954,323). Whether claims 14 and 15 should be rejected under 35 U.S.C. § 102 (b) as being anticipated by Houseman (US 4,852,722). Whether claims 1, 2, 3, 5, 6, 7, 8, 9 and 11 to 16 should be rejected under 35 U.S.C. §103 (a) as being unpatentable over Muller (EP 0771675A1) in view of Emigh et al. (US 5,954,323).

7. ARGUMENTS

Rejections under 35 U.S.C. §102(b): Emigh et al.

Claims 1, 2, 3, 7, 8, 9, 11, 12, 13, 16 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Emigh et al. (US 5,954,323).

Emigh discloses an inserter with a moveable picker arm for removing sheets from the bottom of a stack 27. See col. 3, lines 37 to 53. The arm 17 rotates back and forth via a shaft 13 to pick up the paper material from the stack.

A. Claims 1, 2, 3, 7, 8, 9 and 16

Claim 1 recites “a device for removing folded signatures from a saddle-back conveyor comprising:

- a rotating arm rotating a full rotation;
- a first gripper mounted on the moving arm; and
- an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm.”

Emigh is not “a device for removing folded signatures from a saddle-back conveyor” as claimed, as it is an inserter and has nothing to do with removing signatures from a saddle-back conveyor. On this basis alone, the 102 rejection should be removed.

In addition, the arm 17 in Emigh is not a “rotating arm rotating a full rotation.” Any person skilled in the art of the present invention reviewing the present application would realize that a full rotation means a full 360 degree rotation. This is clear from Fig. 1 which shows the arm only rotating in direction D, and from the term “full rotation.” While Emigh’s

arm 17 rotates back and forth (it appears about 30 degrees), this is clearly not a full rotation as claimed.

Moreover, Emigh does not show “an electromechanical actuator being mounted on the moving arm.” The cylinder 28 is a purely mechanical actuator as defined by the present invention and has no electrical parts mounted to the arm 17 at all.

With the present invention an electrical part such as solenoid 52 is mounted to the rotating arm permitting purely electronic controls via for example a slip ring to be delivered to the electromechanical actuator. See [0008] of the present invention.

Withdrawal of the 102 rejection to claim 1 and its dependent claims is respectfully requested.

i. Claim 2: Argued separately

Claim 2 recites the device as recited in claim 1 further comprising a controller sending electronic signals to the electromechanical actuator for opening and closing the first gripper.

The controller in Fig. 5B of Emigh sends signals to a solenoid valve 33 which is stationary and not attached to arm 17. Since claim 1 states that the electromechanical actuator is connected to the rotating arm, the controller in Emigh is not sending “electronic signals to the electromechanical actuator” “mounted on the moving arm” as claimed by claim 2.

ii. Claim 3: Argued separately

Claim 3 recites the device as recited in claim 1 further comprising a slip contact mounted on the moving arm and electronically connected to the electromechanical actuator.

No slip contact is disclosed in Emigh nor has any been asserted.

iii. Claims 8 and 9: Argued separately

Claim 8 recites the device as recited in claim 7 wherein the cylinder is a pneumatic cylinder and the electromechanical actuator further includes an electronic control valve for providing air to the pneumatic cylinder. Claim 9 depends from claim 8.

Claim 1 requires that the electromechanical actuator be mounted on the rotating arm. Emigh has no electronic control valve as claimed on a rotating arm.

iv. Claim 16: Argued separately

Claim 16 recites a signature transport device comprising:
a saddle-back conveyor; and
the device according to claim 1.

Emigh does not disclose a saddle back conveyor as in dependent claim 1 nor has one been asserted. An inserter typically does not have a saddle back conveyor.

B. Claims 11, 12 and 13

Claim 11 recites a device for removing folded signatures from a saddle-back conveyor comprising:

a rotating arm moving in a reciprocating or rotational movement rotating a full rotation;
a first gripper mounted on the moving arm;
an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm; and
a controller for providing electronic signals to the electromechanical actuator so as to direct the electromechanical actuator to open or close the first gripper during the reciprocating or rotational movement.

As discussed above, Emigh does not show “a device for removing folded signatures from a saddle-back conveyor” or “the electromechanical actuator being mounted on the moving arm” or “a controller for providing electronic signals to the electromechanical actuator” mounted on the moving arm.

Withdrawal of the rejection to claim 11 and its dependent claims is respectfully requested.

i. Claim 12: argued separately

Claim 12 recites the device as recited in claim 11 further comprising an electronic slip contact located on the moving arm and connected electronically to the electromechanical actuator and to the controller.

Emigh does not show such a slip contact.

Rejections under 35 U.S.C. § 102 (b): Houseman (US 4,852,722).

Claims 14 and 15 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Houseman (US 4,852,722).

Houseman discloses a single gripper conveyor system removing sheets from a flat conveyor and having a bracket 144 of a cam assembly 142 (See Fig. 7). The bracket can be replaced by a solenoid operated reciprocating arm having a lower end with a cam surface. See col. 12, line 26 et seq.

Claim 14 recites a method for removing signatures from a saddle-back conveyor comprising the steps of:

reciprocating or rotating an arm to move a gripper to remove signatures from a saddle-back conveyor, the arm defining a full rotation range of motion; and

electronically controlling the gripper during the range of motion to open and close the gripper to grip the signature.

Houseman does not provide “a method for removing signatures from a saddle-back conveyor” as no saddle back conveyor is shown or disclosed. Moreover no gripper is moved to “remove signatures from a saddle-back conveyor” as claimed. Removing signatures from a saddle back conveyor requires a completely different type of device, as the grippers must be oriented differently from those in Houseman.

Withdrawal of the rejections to claim 14 and 15 is respectfully requested.

Rejections under 35 U.S.C. §103(a)

Claims 1, 2, 3, 5, 6, 7, 8, 9 and 11 to 16 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Muller (EP 0771675A1) in view of Emigh et al. (US 5,954,323).

Mueller is discussed at [0003] of the present specification and shows a device for removing printed products from a saddleback conveyor.

A. Claim 1 and its dependent claims

Claim 1 recites “a device for removing folded signatures from a saddle-back conveyor comprising:

a rotating arm rotating a full rotation;

a first gripper mounted on the moving arm; and

an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm.”

The Mueller removal device shown in Fig. 2 is actuated mechanically via gears, and

thus does not have an electromechanical actuator mounted on a moving arm as claimed. As discussed above, Emigh also does not have an electromechanical actuator on a moving arm and thus the combination of the Mueller and Emigh (which is respectfully submitted as not proper anyway) would not result in the claimed invention.

In addition, it is respectfully submitted that one of skill in the art would not have found it obvious to have used the pneumatic device with lines 32 of Emigh in the Mueller device, as the lines 32 of Emigh would be wrapped up as the arm of Mueller rotates and not work with the fully rotating arm of Mueller.

Moreover, Emigh relates to a completely different device, an inserter, than the saddleback conveyor of Mueller.

Withdrawal of the rejection with respect to claim 1 and its dependent claims is respectfully requested.

i. Claim 2: Argued separately

Claim 2 recites the device as recited in claim 1 further comprising a controller sending electronic signals to the electromechanical actuator for opening and closing the first gripper.

The controller in Fig. 5B of Emigh sends signals to a solenoid valve 33 which is stationary and not attached to arm 17. Since claim 1 states that the electromechanical actuator is connected to the rotating arm, the controller in Emigh is not sending "electronic signals to the electromechanical actuator" "mounted on the moving arm" as claimed by claim 2.

ii. Claim 3: Argued separately

Claim 3 recites the device as recited in claim 1 further comprising a slip contact mounted on the moving arm and electronically connected to the electromechanical actuator.

No slip contact is disclosed in Emigh nor has any been asserted.

iii. Claims 8 and 9: Argued separately

Claim 8 recites the device as recited in claim 7 wherein the cylinder is a pneumatic cylinder and the electromechanical actuator further includes an electronic control valve for providing air to the pneumatic cylinder. Claim 9 depends from claim 8.

Claim 1 requires that the electromechanical actuator be mounted on the rotating arm. Emigh has no electronic control valve as claimed on a rotating arm.

B. Claims 11, 12 and 13

Claim 11 recites a device for removing folded signatures from a saddle-back conveyor comprising:

- a rotating arm moving in a reciprocating or rotational movement rotating a full rotation;
- a first gripper mounted on the moving arm;
- an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm; and
- a controller for providing electronic signals to the electromechanical actuator so as to direct the electromechanical actuator to open or close the first gripper during the reciprocating or rotational movement.

Neither Emigh nor Muller shows an electromechanical actuator mounted on a moving arm.

In addition, it is respectfully submitted that one of skill in the art would not have found it obvious to have used the pneumatic device with lines 32 of Emigh in the Mueller device, as the lines 32 of Emigh would be wrapped up as the arm of Mueller rotates and not work with the fully rotating arm of Mueller.

Moreover, Emigh relates to a completely different device, an inserter, than the saddleback conveyor of Mueller.

Withdrawal of the rejection with respect to claim 11 and its dependent claims is respectfully requested.

i. Claim 12: argued separately

Claim 12 recites the device as recited in claim 11 further comprising an electronic slip contact located on the moving arm and connected electronically to the electromechanical actuator and to the controller.

Emigh does not show such a slip contact.

C. Claims 14 and 15

Claim 14 recites a method for removing signatures from a saddle-back conveyor comprising the steps of:

- reciprocating or rotating an arm to move a gripper to remove signatures from a saddle-

back conveyor, the arm defining a full rotation range of motion; and

electronically controlling the gripper during the range of motion to open and close the gripper to grip the signature.

It is respectfully submitted that one of skill in the art would not have found it obvious to have used the pneumatic device with lines 32 of Emigh in the Mueller device, as the lines 32 of Emigh would be wrapped up as the arm of Mueller rotates and not work with the fully rotating arm of Mueller.

Moreover, Emigh relates to a completely different device, an inserter, than the saddleback conveyor of Mueller.

Withdrawal of the rejection with respect to claim 14 and its dependent claim is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is in condition for allowance.
Favorable consideration of this appeal brief is respectfully requested.

Respectfully submitted,
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APPENDIX A:

PENDING CLAIMS 1-3, and 5-16 OF
U.S. APPLICATION SERIAL NO. 10/771,994



Claim 1 (previously presented): A device for removing folded signatures from a saddle-back conveyor comprising:

- a rotating arm rotating a full rotation;
- a first gripper mounted on the moving arm; and
- an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm.

Claim 2 (original): The device as recited in claim 1 further comprising a controller sending electronic signals to the electromechanical actuator for opening and closing the first gripper.

Claim 3 (previously presented): The device as recited in claim 1 further comprising a slip contact mounted on the moving arm and electronically connected to the electromechanical actuator.

Claim 5 (original): The device as recited in claim 4 wherein the first gripper is mounted rotatably on the rotating arm and remains in a horizontal orientation relative to a spine of the signatures during a full rotation of the rotating arm.

Claim 6 (original): The device as recited in claim 4 further comprising a second gripper located on the rotating arm opposite the first gripper.

Claim 7 (original): The device as recited in claim 1 wherein the first gripper has a first gripper part and a second gripper part movable with respect to the first gripper part for gripping the signature, and the electromechanical actuator includes a cylinder with a linkage connected to the second gripper part for moving the second gripper part.

Claim 8 (original): The device as recited in claim 7 wherein the cylinder is a pneumatic cylinder and the electromechanical actuator further includes an electronic control valve for providing air to the pneumatic cylinder.

Claim 9 (original): The device as recited in claim 8 wherein the electronic control valve is a solenoid control valve.

Claim 10 (original): The device as recited in claim 7 wherein the first gripper is mounted on the arm at a first axis, and the pneumatic cylinder is fed air via an air conduit entering the pneumatic cylinder at the first axis.

Claim 11 (previously presented): A device for removing folded signatures from a saddle-back conveyor comprising:

- a rotating arm moving in a reciprocating or rotational movement rotating a full rotation;

- a first gripper mounted on the moving arm;

- an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm; and

- a controller for providing electronic signals to the electromechanical actuator so as to direct the electromechanical actuator to open or close the first gripper during the reciprocating or rotational movement.

Claim 12 (previously presented): The device as recited in claim 11 further comprising an electronic slip contact located on the moving arm and connected electronically to the electromechanical actuator and to the controller.

Claim 13 (original): The device as recited in claim 11 wherein the controller is capable of setting a position of the gripper over a full range of the reciprocating or rotational movement.

Claim 14 (previously presented): A method for removing signatures from a saddle-back conveyor comprising the steps of:

reciprocating or rotating an arm to move a gripper to remove signatures from a saddle-back conveyor, the arm defining a full rotation range of motion; and
electronically controlling the gripper during the range of motion to open and close the gripper to grip the signature.

Claim 15 (original): The method as recited in claim 14 further comprising adjusting a closing distance of the first gripper as a function of the signature thickness or material.

Claim 16 (original): A signature transport device comprising:

a saddle-back conveyor; and
the device according to claim 1.

Application No.: 10/771,994
Appeal Brief dated February 9, 2006

APPENDIX B

Evidence Appendix under 37 C.F.R. §41.37 (c) (ix):

No evidence pursuant to 37 C.F.R. §§1.130, 1.131 or 1.132 and relied upon in the appeal has been submitted by appellants or entered by the examiner.



APPENDIX C

Related proceedings appendix under 37 C.F.R. §41.37 (c) (x):

As stated in "2. RELATED APPEALS AND INTERFERENCES" of this appeal brief, appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

